2005 Urban Water Management Plan "Review for Completeness" Form

Coordination with Appropriate Agencies (Water Code § 10620 (d)(1)(2))

Participated in area, regional, watershed or basin wide plan

Chapter 1, Pages1-2, 1-5 through 1-8

Name of plan 2005 Urban Water Management Plan For Municipal Water District of Orange County

Lead Agency MWDOC

YES

YES

Describe the coordination of the plan preparation and anticipated benefits.

Chapter 1, Pages 1-5 through 1-9

	Table 1 Coordination with Appropriate Agencies										
Check at least one box on each row	Participated in developing the plan	Commented on the draft	Attended public meetings	Was contacted for assistance	Was sent a copy of the draft plan	Was sent a notice of intention to adopt	Not Involved / No Information				
City of Yorba Linda		$\sqrt{}$			$\sqrt{}$	$\sqrt{}$					
YLWD	V	$\sqrt{}$		√	$\sqrt{}$						
Metropolitan						√					
SCWC						√					
MWDOC	V			√		√					
Risk Management Professionals	V		√								
City of Brea						V					
City of Anaheim						V					
City of Placentia						V					

Describe	resource maximization / import minimization plan	(Water Code §10620 (f))
YES	Describe how water management tools / options maximize resources & minimize need to import water	Chapter 7, Pages 7-1 through 7-3 Chapter 3, Pages 3-1, 3-11, 3-17
Plan Upda	ated in Years Ending in Five and Zero	(Water Code § 10621(a))
YES	Date updated and adopted plan received 12/22/2005 (enter date)	Appendix A
City and C	County Notification and Participation	(Water Code § 10621(b))
YES	Notify any city or county within service area of UWMP of plan review & revision	Chapter 1, Pages 1-5 through 1-7
YES	Consult and obtain comments from cities and counties within service area	Chapter 1, Pages 1-5 through 1-7
Service A	rea Information	Water Code § 10631 (a))
YES	Include current and projected population	Chapter 2, Page 2-4
YES	Population projections were based on data from state, regional or local agency	Chapter 2, Page 2-4

Table 2									
Population - Current and Projected									
	2005 2010 2015 2020 2025 2030 - opt								
Service Area Population 62,496 65,773 67,256 68,055 68,481 68,576									

Describe climate characteristics that affect water management

YES

Describe other demographic factors affecting water management

Chapter 2, Pages 2-5, 2-6 Chapter 3, Page 3-20 Chapter 2, Page 2-7

Table 3 Climate									
January February March April May June									
Standard Average ETo	2.18	2.49	3.67	4.71	5.18	5.87			
Average Rainfall	2.5	2.3	2.3	0.8	0.3	0.1			
Average Temperature	57.7	58.8	60.1	63.3	66.4	70.4			

	Table 3 (continued)									
	Climate									
July August September October November December Annual										
Average ETo	6.29	6.17	4.57	3.66	2.59	2.25	49.63			
Average Rainfall	Average Rainfall 0 0.1 0.4 0.3 1.7 1.8 12.60									
Average Temperature	74.2	75.4	74	69.1	62.7	58.2	65.86			

Water Sources

Identify existing and planned water supply sour

YES YES Provide current water supply quantities

Provide planned water supply quantities

(Water Code § 10631 (b))

Chapter 3, Pages 3-1 through 3-15, 3-21 Chapter 3, Pages 3-3 Chapter 3, Pages 3-3

Table 4 Current and Planned Water Supplies - AFY									
Water Supply Sources 2005 2010 2015 2020 2025 2030 - opt									
Water purchased from:									
Metropolitan Water District of Southern Ca									
Municipal Water District of Orange County	12,987	11,280	12,394	12,694	12,619	12,546			
Orange County Water District (Lower Santa Ana Basin)	11,644	14,759	14,444	14,623	14,919	15,134			

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California Domestic Water Company						
Supplier produced groundwater						
Supplier surface diversions						
Transfers in or out						
Exchanges In or out						
Recycled Water (projected use)						
Desalination						
Other						
Other						
Total	24,631	26,039	26,838	27,317	27,537	27,680

If Groundwater identified as existing or planned source

YES Has management plan

NO Attached management plan (b)(1)

YES Description of basin(s) (b)(2)

NO Basin is adjudicated

If adjudicated, attached order or decree (b)(2)

Quantified amount of legal pumping right (b)(2)

(Water Code §10631 (b)(1-4))

YLWD pumps water from the Orange County Basin (Chapter 7, Pages 3-7 through 3-18)

Table 5					
Groundwater Pumping Rights - AF Year					
Basin Name Nica	Purping AFY				
Not Applies					
1400					
Total	0				

NO N/A DWR identified, or projected to be, in overdraft (b)(2)

A Plan to eliminate overdraft (b)(2)

Analysis of location, amount & sufficiency, last five years (b)(3)

Analysis of location & amount projected, 20 years (b)(4)

Chapter 3, Pages 3-7 through 3-18 N/A Chapter 3, Pages 3-5, 3-6, 3-18 Chapter 3, Page 3-3

Table 6 Amount of Groundwater pumped - AFY										
Basin Name (s) 2000 2001 2002 2003 2004										
La Habra Basin	0	0	0	0	0					
San Juan Basin										
Lower Santa Ana Basin	10,811	10,533	10,090	9,354	10,416					
6 of Total Retail Water Supply	49.18%	48.82%	43.01%	41.32%	44.81%					

Table 7

Amount of Groundwater projected to be pumped - AFY										
Basin Name(s) 2010 2015 2020 2025 2030 - opt										
La Habra Basin	0	0	0	0	0					
Laguna Canyon Basin										
San Juan Basin										
Lower Santa Ana Basin	14,759	14,444	14,623	14,919	15,134					
of Total Retail Water Supply	56.7%	53.8%	53.5%	54.2%	54.7%					

Reliability of Supply (Water Code §10631 (c) (1-3)

YES

Describes the reliability of the water supply and vulnerability to seasonal or climatic shortage

		Table 8						
	Supply	Reliability - AF	Year					
2005-2010	Normal	Single	Multiple Dry Water Years					
	Water Year (Average)	Dry Year (1961)	2008	(1959)	2009	(1960)	2010	(1961)
Local Supply	14,759	14,682		15,709		15,052		14,682
	% of Normal	99.5%		106.4%		102.0%		99.5%
Imported Supply	11,280	12,807		11,520		11,721		12,807
	% of Normal	113.5%		102.1%		103.9%		113.5%
2010-2015	Normal	Single		Multi	ple Dr	y Water	Years	
	Water Year (Average)	Dry Year (1961)	2013	(1959)	2014	(1960)	2015	(1961)
Local Supply	14,444	13,239		13,612		13,053		13,239
	% of Normal	91.7%		94.2%		90.4%		91.7%
Imported Supply	12,394	15,094		14,709		14,646		15,094
	% of Normal	121.8%		118.7%		118.2%		121.8%
2015-2020	Normal	Single		Multi	ple Dr	y Water	Years	
	Water Year (Average)	Dry Year (1961)	2018	(1959)	2019	(1960)	2020	(1961)
Local Supply	14,623	13,128		13,381		12,856		13,128
	% of Normal	89.8%		91.5%		87.9%		89.8%
Imported Supply	12,694	15,709		15,584		15,402		15,709
	% of Normal	123.8%		122.8%		121.3%		123.8%
2020-2025	Normal	Single	Multiple Dry Water Years					
	Water Year (Average)	Dry Year (1961)	2023	(1959)	2024	(1960)	2025	(1961)
Local Supply	14,919	13,224		14,047		12,923		13,224
	% of Normal	88.6%		94.2%		86.6%		88.6%
Imported Supply	12,619	15,847		15,249		15,599		15,847

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Chapter 3, Pages 3-21 through 3-26

	% of Normal	125.6%	120.8%	123.6%	125.6%
2025-2030	Normal	Single	Mult	iple Dry Water	Years
	Water Year (Average)	Dry Year (1961)	2028 (1959)	2029 (1960)	2030 (1961)
Local Supply	15,134	13,604	14,708	13,261	13,604
	% of Normal	89.9%	97.2%	87.6%	89.9%
Imported Supply	12,546	15,617	14,779	15,432	15,617
	% of Normal	124.5%	117.8%	123.0%	124.5%

Table 9 Basis of Water Year Data						
Water Year Type						
Average Water Year	Average of His	storical Hydrolog 2004	y from 1922 to			
Single-Dry Water Year	1961					
Multiple-Dry Water Years	1959	1960	1961			

Chapter 3, Page 3-22

Water So	urces Not Available on a Consistent Basis	(Water Code §10631 (c))
YES	Describe the reliability of the water supply due to seasonal or climatic shortages	Chapter 3, Pages 3-25, 3-26
YES	Describe the vulnerability of the water supply to seasonal or climatic shortages	Chapter 3, Pages 3-25, 3-26
NO	No unreliable sources	Chapter 3, Pages 3-25, 3-26

Table 10 Factors resulting in inconsistency of supply					
Name of supply Legal Environ- mental Water Quality Climatic					
Metropolitan Water District of Southern California				Х	
Lower Santa Ana Basin				Х	
Surface Diversions				Х	

YES	Describe plans to supplement or replace inconsistent sources with alternative sources or DMMs	Chapter 3, Page 3-23
NO	No inconsistent sources	Chapter 3, Pages 3-21 through 3-26

Transfer of	or Exchange Opportunities	(Water Code §10631 (d))
YES	Describe short term and long term exchange or transfer opportunities	Chapter 3, Pages 3-27 through 3-28
NO	No transfer opportunities	Chapter 3, Fages 3-27 through 3-20

Table11

Transfer and Exchange Opportunities - AF Year							
Transfer Agency	Transfer or Exchange	Short term	Proposed Quantities	Long term	Proposed Quantities		
					(
		(ica				
No		יכן)				
140		_					
Total			0		0		

Water Use Provisions (Water Code §10631 (e)(1)(2))

YES Quantify past water use by sector
YES Quantify current water use by sector
YES Project future water use by sector

Chapter 4, Page 4-4

Table 12 - Past, Current and Projected Water Deliveries						
	1999-2000					
	metered unmetered					
Water Use Sectors	# of accounts Deliveries AFY # of accounts Deliveries A					
Municipal & Industrial		22,572				
Agriculture	249					
Total	0	22,820	0	0		

Table 12 (Continued) - Past, Current and Projected Water Deliveries						
	2005					
	metered unmetered					
Water Use Sectors	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY		
Municipal & Industrial		24,587				
Agriculture		44				
Total	0 24,631 0					

Table 12 (Continued) - Past, Current and Projected Water Deliveries							
	2010						
	metered unmetered						
Water Use Sectors	# of accounts Deliveries AFY # of accounts Deliveries A						
Municipal & Industrial		25,995					
Agriculture	44						
Total	0 26,039 0 0						

Table 12 (Continued) - Past, Current and Projected Water Deliveries					
	2015				
	metered unmetered				

Water Use Sectors	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY
Municipal & Industrial		26,795		
Agriculture		44		
Total	0	26,838	0	0

Table 12 (Continued) - Past, Current and Projected Water Deliveries							
	2020						
	metered unmetered						
Water Use Sectors	# of accounts Deliveries AFY # of accounts Deliveries						
Municipal & Industrial		27,273					
Agriculture		44					
Total	0	27,317	0	0			

Table 12 (Continued) - Past, Current and Projected Water Deliveries								
	2025							
	metered unmetered							
Water Use Sectors	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY				
Municipal & Industrial		27,494	94					
Agriculture	44							
Total	0	27,537	0	0				

Table 12 (Continued) - Past, Current and Projected Water Deliveries								
	2030 - opt							
	metered unmetered							
Water Use Sectors	# of accounts	Deliveries AFY	# of accounts	Deliveries AFY				
Municipal & Industrial		27,637						
Agriculture		44						
Total	0	27,680	0	0				

Identify and quantify sales to other agencies No sales to other agencies Chapter 4, Page 4-8 Chapter 4, Page 4-8

Table 13								
	Sales to	Other Agencie	es - AF Year					
Water Distributed	1999-2000	2005	2010	2 20	20_0	2025		
	. 0		Q.		0	0		
name of agency	- 4							
name of agency								
Total	0	0	0	0	0	0		

Identify and quantify additional water uses

Chapter 4, Page 4-8

		Table 14				
	Additional Wa	iter Uses and I	Losses - AF Ye	ar		
Water Use	1999-2000	2005	2010	2015	2020	2025
Saline barriers						
Groundwater recharge						
Conjunctive use						
raw water						
recycled	\ +					
other (define)		-				
Unaccounted-for system losses						
Total	0	0	0	0	0	

Table 15								
Total Water Use - AF Year								
Water Use	1999-2000	2005	2010	2015	2020	2025	2030 - opt	
Total of Tables 12, 13, 14	22,820	24,631	26,039	26,838	27,317	27,537	27,680	

2005 Urban Water Management Plan "Review of DMMs for Completeness" Form

(Water Code §10631 (f)

(Water Code §10631 (f) & (g), the 2005 Urban Water Management Plan "Review of DMMs for Completeness" Form is found on Sheet 2

(Water Code §10631 (g)) Planned Water Supply Projects and Programs, including non-implemented DMMs Chapter 6, Page 6-2 YES No non-implemented / not scheduled DMMs N/A Cost-Benefit includes economic and non-economic factors (environmental, social, health, customer impact, and technological factors) N/A Cost-Benefit analysis includes total benefits and total costs YLWD Implements/ Plans to Implement all N/A Identifies funding available for Projects with higher per-unit-cost than DMMs Applicable DMMs Identifies Suppliers' legal authority to implement DMMs, efforts to implement the measures and efforts to identify cost share partners

Table 16 Evaluation of unit cost of water resulting from non-implemented / non-schedule and planned water supply project and programs	d DMMs
Non-implemented & Not Scheduled DMM / Planned Water Supply Projects (Name)	Per-AF Cost (\$)
Not Applicable	

	Water Supply Projects and Programs	(Water Code §10631 (h))
NO	No future water supply projects or programs	Chapter 7, Pages 7-1 through 7-3
YES	Detailed description of expected future supply projects & programs	Chapter 7, Pages 7-1 through 7-3
YES	Timeline for each proposed project	Chapter 7, Pages 7-1 through 7-3
N/A	Quantification of each projects normal yield (AFY)	
N/A	Quantification of each projects single dry-year yield (AFY)	
N/A	Quantification of each projects multiple dry-year yield (AFY)	

Table 17 Future Water Supply Projects							
					2010 - 2030		
Project Name	Projected Start Date	Projected Completion Date	Normal-year Single-dry Multiple-Dry- Multiple-Dry- Multiple				Multiple-Dry- Year 3 AF
None		-+	<u>A </u>	ОШ			
	N	OL /	P				

Opportunities for development of desalinated water Describes opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply (Water Code §10631 (i)) Chapter 7, Page 7-2

No opportunities for development of desalinated water

Table 18	
Opportunities for desalinated w	
Sour e o mt	check if yes
Does n Male	
Brackish ocean water	
Brackish groundwater	

District is a CUWCC signatory

(Water Code § 10631 (j))

Urban suppliers that are California Urban Water Conservation Council members may submit the annual reports identifying water demand management measures currently being implemented, or scheduled for implementation, to satisfy the requirements of subdivisions (f) and (g).

The supplier's CUWCC Best Management Practices Report should be attached to the UWMP.

NO

Agency is a CUWCC member

N/A

2003-04 annual updates are attached to plan

Both annual updates are considered completed by CUWCC website

If Supplier receives or projects receiving water from a wholesale supplier

(Water Code §10631 (k))



Agency receives, or projects receiving, wholesale water

Agency provided written demand projections to wholesaler, 20 years

Chapter 3, Pages 3-2, 3-19, 3-20 Chapter 1, Page 1-5

Table 19								
Agency demand projections provided to wholesale suppliers - AFY								
Wholesaler	2010 2015 2020 2025 2030 - op							
MWDOC	11,280	12,394	12,694	12,619	12,546			
(name 2)								
(name 3)								

YES

Wholesaler provided written water availability projections, by source, to agency, 20 years

Chapter 1, Page 1-5

Table 20 Wholesaler identified & quantified the existing and planned sources of water- AFY							
Wholesaler sources	2010 2015 2020 2025 2030 - opt						
MWDOC	11,280	12,394	12,694	12,619	12,546		
(source 2)							
(source 3)							

Table 21 Wholesale Supply Reliability - % of normal AFY								
		Single Dry Multiple Dry Water Years						
Wholesaler sources		1961	Year 1 (1959)	Year 2(1960)	Year 3 (1961)			
MWDOC	2010	114%	102%	104%	114%			
MWDOC	2015	122%	119%	118%	122%			
MWDOC	2020	124%	123%	121%	124%			
MWDOC	2025	126%	121%	124%	126%			
MWDOC	2030	124%	118%	123%	124%			

Table 22 Factors resulting in inconsistency of wholesaler's supply					
Name of supply Legal Environment Water Quality Climatic					
MWDOC				Х	

Water Shortage Contingency Plan Section Stages of Action

(Water Code § 10632) (Water Code § 10632 (a))

YES Provide stag

YES

Provide stages of action

YES Provide the water supply conditions for each stage

Includes plan for 50 percent supply shortage

Chapter 8, Pages 8-3, 8-3

Table 23 Water Supply Shortage Stages and Conditions			
Stage No.	Water Supply Conditions	% Shortage	
Level 1: Voluntary Conservation Measures (Targeted 10% Reduction)	Level 1 measures may be declared by the Board of Directors when, in their judgment, the possibility exists YLWD may not be able to meet all of the demands of its customers without punitive surcharges levied against YLWD due to restrictions on imported supply.		

Level 2: Mandatory Conservation – Water Watch (Targeted 25% Reduction)	Level 2 measures, hereinafter referred to as "Water Watch", may be declared by the Board of Directors when, in their judgement, the probability exists that YLWD will not be able to meet all of the water demands of its customers without punitive surcharges levied against YLWD due to restrictions on imported supply.	The Board of Directors shall, by separate Resolution, determine the extent of conservation required by setting a percentage of the Base Target Amount for high priority and low priority water use, advise customers of ways to save water and may enforce such allocation by mandating certain practices.
Stage 3: Mandatory Reduction – Water Warning (Targeted 35% Reduction)	Level 3 measures, hereinafter referred to as "Water Warning", may be declared by the Board of Directors when, in their judgment, YLWD will not be able to meet all of the water demands of its customers without punitive surcharges levied against YLWD due to restrictions on imported supply.	The Board of Directors shall, by separate resolution, determine the extent of conservation required, set a percentage of the Base Target Amount for high priority and low priority water use, advise customers of ways to save water and may enforce such allocation by mandating certain practices
Stage 4: Water Emergency (Targeted 50% Reduction)	Level 4 measures, hereinafter referred to as "Water Emergency", may be declared by the Board of Directors when the failure of any supply or distribution facility, whether temporary or permanent, occurs in the water distribution system of the State Water Project, Metropolitan Water District of Southern California, Municipal Water District of Orange County, Orange County Water District or Yorba Linda Water District may seriously affect the ability to supply water to customers.	conservation required, set a percentage of the Base Target Amount for high priority and low priority water use, advise customers of ways to save water and may enforce such

Three-Yea	r Minimum Water Supply	(Water Code §10632 (b))
YES	Identifies driest 3-year period	Chapter 8, Page 8-4
YES	Minimum water supply available by source for the next three years	Chapter 8, Page 8-4

Table 24						
Three-Year Estimated Minimum Water Supply (Based on Multiple Dry Years) - AF Year						
Normal Multiple Dry Year				ar		
source**	2006	2007	2008	2006	2007	2008

12/28/2005

Groundwater (Orange County Basin)	12,555	13,876	14,721	12,795	13,833	15,491
Wholesale Water (Metropolitan via MWDOC)	12,372	11,346	10,796	13,804	12,327	11,447
Total	24,926	25,222	25,517	26,599	26,160	26,939

Preparation for catastrophic water supply interruption

(Water Code §10632 (c))

YES

Provided catastrophic supply interruption plan

Chapter 8, Pages 8-5, 8-6

Table 25 Preparation Actions for a Cata	ctronho
Possible Catastrophe	Check if Discussed
Regional power outage	√
Earthquake	√
Terrorism	V

Prohibitions (Water Code § 10632 (d))

YES

List the mandatory prohibitions against specific water use practices during water shortages

Chapter 8, Pages 8-7 through 8-12

Table 26 Mandatory Prohibitions		
Consumption Reduction Methods and Prohibitions	Stage When Prohibition Becomes Mandatory	
Customer Actions		
Check monthly for plumbing leaks and any leaks found should be repaired immediately.	Level 1	
2. Irrigate commercial nurseries, golf courses, parks, school yards, traffic medians and other public open space and other non residential landscaped areas no more often than every third day, and only between the hours of 6:00 p.m. and 5:00 a.m.	Level 1	

3. Reduce outside irrigation schedules to the absolute minimum to keep important plants alive. Withhold fertilizer to inhibit new growth.	Level 1
4. Residential customers with addresses ending with an even number water lawns, landscaping and other turf areas only on even number days of the month and between the hours of 4:00 p.m. and 10:00 a.m. Residential customers with addresses ending with an odd number water lawns, landscape, and other turf areas only on odd number days of the month and between the hours of 4:00 p.m. and 10:00 a.m.	Level 1
5. Adjust sprinklers to avoid "watering" sidewalks and gutters, and lower pressure to avoid creating a wasteful mist.	Level 1
6. Eliminate washing of sidewalks, walkways, buildings, walls, patios, driveways, parking areas or other paved surfaces, or walls except to eliminate conditions dangerous to public health or safety or when required as surface preparation for the application of architectural coating or painting, and to alleviate immediate fire hazards.	Level 1
7. Curtail water use to clean, fill or maintain levels in decorative fountains, ponds, lakes, or other similar aesthetical structures unless such water use is approved in advance by YLWD.	Level 1
8. Curtail water used for the initial filling or refilling of swimming pools, spas or ponds unless such water use is approved in advance by YLWD. Replacement due to evaporation is permitted.	Level 1
9. Curtail washing of motor vehicles, trailers, boats and other types of equipment unless a bucket and a hose equipped with a positive shutoff nozzle for quick rinses is used. Washing of vehicles may be done by a commercial car wash that uses recycled water.	Level 1
10. Display notice that water will be served only upon request at all restaurants, hotels, cafes, cafeterias or other public place where food is sold, served or offered for sale.	Level 1
11. Water should only be served when requested by a customer in restaurants, hotels, cafes, cafeterias or other public places where food is sold or offered for sale.	Level 1
12. Post notice of the water supply shortage in each room of hotels, motels, inns, guest houses, bed and breakfast facilities and short–term commercial lodgings along with an explanation of necessary compliance measures taken by the establishment.	Level 1
13. Install low–flow shower heads, toilet dams or low–flow toilets, and faucet flow restrictors in each room of hotels, motels, inns, guest houses, bed and breakfast facilities and short–term commercial lodgings.	Level 1
14. Hand water plants with a positive shut–off hose nozzle.	Level 1

	l
15. Place a plastic bottle, bag or dam in all toilets.	Level 1
16. Use automatic dish and clothes washers for full loads only.	Level 1
17. Insulate hot water pipes to reduce waiting time for hot water. Install circulating hot water system or point of use water heater.	Level 1
18. Turn off the water while brushing teeth, washing hands and/or shaving.	Level 1
19. Install water saving shower heads and/or flow restrictors.	Level 1
20. Take shorter showers. Turn off the water when lathering, shampooing, or shaving. Turn the shower back on to rinse.	Level 1
21. Capture bath/shower warm–up water in buckets and use the water to irrigate plants or to flush toilets.	Level 1
22. Use garbage disposers sparingly	Level 1
23. Do not plant any annuals or new plants that will require extra watering.	Level 1
24. Place mulching material in landscaped areas to decrease soil moisture evaporation.	Level 1
25. Use a broom to clean outside patios, porches and sidewalks.	Level 1
26. Cover spas and swimming pools when not in use. If spa or pool will not be used, make necessary preparations for not refilling the spa or pool while shortage lasts.	Level 1

District Actions

Limit use of water from fire hydrants to fire fighting, approved construction activities or other activities as approved by YLWD as necessary to maintain the health, safety and welfare of the public.	Level 1
2. Turn off all construction meters until the condition(s) causing the shortage are abated to the satisfaction of the General Manager.	Level 1
Issue no construction meters for earth work or road construction purposes.	Level 1
Moratorium on new service connections.	Level 1

Consumption Reduction Methods

(Water Code § 10632 (e))

YES

List the consumption reduction methods the water supplier will use to reduce water use in the most restrictive stages with up to a 50% reduction.

Chapter 8, Pages 8-7 through 8-12

Table 27 Consumption Reduction Me*hods	06	
Consumption Reduction Methods 20 C	Strue Wenderlood Takes Effect	Projected Reduction (%)
name method		
name method		
name method		

Penalties		(Water Code § 10632 (f))
YES	List excessive use penalties or charges for excessive use	Chapter 8, Pages 8-13, 8-14
	•	

Table 28 Penalties and Charges

Penalties	Stage When Penalty Takes Effect	Stage When Penalty Takes Effect
Warning	1st Violation	1st Violation
Letter Explaining Violation	2nd Violation	2nd Violation
Flow Restricting Orifice	3rd Violation	3rd Violation
Charges		
Excess Water Use Rate	Any Violation	Any Violation
One-Time Charge of Two Times the Latest Water Bill	2nd Violation	2nd Violation
Charge for Costs of Installation and Removal of Flow Restricting Orifice	3rd Violation	3rd Violation

Revenue and Expenditure Impacts

Describe how actions and conditions impact revenues

YES Describe how actions and conditions impact expenditures

Describe measures to overcome the revenue and expenditure impacts

(Water Code § 10632 (g))

Chapter 8, Page 8-15 Chapter 8, Page 8-15 Chapter 8, Pages 8-15, 8-16

Table 29 Proposed measures to overcome revenue impacts				
Names of measures	Check if Discussed			
1. Rate Adjustment	√			
2. Water Fund Balance	√			
3. Bonds	√			

Table 30	
Proposed measures to overcome expenditure impacts	
Names of measures	Check if Discussed
Capital Improvements Program	√

Water Shortage Contingency Ordinance/Resolution

Attach a copy of the draft water shortage contingency resolution or ordinance.

(Water Code § 10632 (h))

Appendix E

Reduction Measuring Mechanism

YES

Yes

Provided mechanisms for determining actual reductions

(Water Code § 10632 (i))

Chapter 8, Page 8-17

Table 31

Water Use Monitoring Mechanisms

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Mechanisms for determining actual reductions	Type data expected
1. Production Meter Readings	GPD
2. Imported Water Metering	GPD
3. Residential Water Metering and Site Monitoring	GPD

Recycling Plan Agency Coordination

NO

Describe the coordination of the recycling plan preparation information to the extent available.

Water Code § 10633

Not Applicable / YLWD does not currently utilize recycled water (Chapter 7, Pages 7-2, 7-3)



Wastewater System Description

YES

Describe the wastewater collection and treatment systems in the supplier's service area

N/A

Quantify the volume of wastewater collected and treated

(Water Code § 10633 (a))

The Orange County Sanitation District collects and treats wastewater for Orange County (Chapter 7, Pages 7-2,3)

Table 33								
	Wastewater Collection and Treatment - AF Year							
Type of Wastewater	Type of Wastewater 2000 2005 2010 2015 2015 2025							
Wastewater collected & treated in service								
area	N							
Volume that meets recycled water standard								

Wastewater Disposal and Recycled Water Uses

YES

Describes methods of wastewater disposal

N/A

Describe the current type, place and use of recycled water

ES No

1/4

Describe and quantify potential uses of recycled water

(Water Code § 10633 (a - d))

The Orange County Sanitation District collects and treats wastewater for Orange County (Chapter 7, Pages 7-2,3)

Table 34

Disposal of wastewater (non-recycled) AF Year							
Method of disposal	Treatment Level	2005	2010	2015	2020	2025	
Name of method					9		
Name of method		^	nii				
Name of method	NO		,,,,				
Name of method	140						
	Total	0	0	0	0	0	

Table 35 Recycled Water Uses - Actual and Potential (AFY)									
User type	e Treatment Level 2005 2010 2015 2020 2025								
Agriculture									
Landscape				_					
Wildlife Habitat			plic	3 h	e				
Wetlands	4)					
Industrial	NO								
Groundwater Recharge	-								
Other (user type)									
Other (user type)		·							
	Total	0	0	0	0	0			

Determination of technical and economic feasibility of serving the potential uses

Chapter 7, Page 7-3

Projected Uses of Recycled Water

N/A

Projected use of recycled water, 20 years

(Water Code § 10633 (e))

Not Applicable / YLWD does not currently utilize recycled water (Chapter 7, Pages 7-2, 7-3)

Table 36 Projected Future Use of Recycled Water in Services reF Year								
Not	2015 2020 2025 2030 - opt							
Projected use of Recycled Water								

N/A Yes Compare UWMP 2000 projections with UWMP 2005 actual (§ 10633 (e)) None

Not Applicable / YLWD does not currently utilize recycled water (Chapter 7, Pages 7-2, 7-3)

Table 37							
Recycled Water Uses	Recycled Water Uses - 2000 Projection compared with 2005 actual - AFY						
User type	2000 Projection for 2005	2005 actual use					
Agriculture							
Landscape		icable					
_		ICO -					

Wildlife Habitat		_	anl	icabie
Wetlands	nt.	A)	
Industrial				
Groundwater Recharge				
Other (user type)				
Other (user type)				
Tota			0	0

Plan to Optimize Use of Recycled Water N/A Describe actions that might be taken to encourage recycled water uses Describe projected results of these actions in terms of acre-feet of recycled water used per year Water Code § 10633 (f)) Not Applicable / YLWD does not currently utilize recycled water (Chapter 7, Pages 7-2, 7-3)

Methods to Enc	Table 38	led Water Use				
Methods to Encourage Recycled Water Use AF of use projected to result from this action						
Actions	2010	2015	2020	2025	2030 - opt	
Financial incentives						
name of action			_			
name of action	40	olic	abı			
name of action						
name of action						
name of action						
Total	0	0	0	0	0	

YES

N/A

Provide a recycled water use optimization plan which includes actions to facilitate the use of recycled water (dual distribution systems, promote recirculating uses)

Chapter 7, Page 7-3

Water quality impacts on availability of supply

Discusses water quality impacts (by source) upon water management strategies and supply reliability

YES No water quality impacts projected

Chapter 3, Page 3-25

(Water Code §10634)

Table 39									
Current &	Current & projected water supply changes due to water quality - percentage								
water source	2005	2010	015	2(40)	2025	2030 - opt			
	1	AD)					
	7								

Supply and Demand Comparison to 20 Years

(Water Code § 10635 (a))

YES

Compare the projected normal water supply to projected normal water use over the next 20 years, in 5-year increments.

Chapter 5, Pages 5-1, 5-2

Table 40							
Projected Normal Water Supply - AF Year							
(from table 4)	2010	2015	2020	2025	2030 - opt		
Supply	26,039	26,838	27,317	27,537	27,680		
% of year 2005	106%	109%	111%	112%	112%		

Table 41 Projected Normal Water Demand - AF Year							
(from table 15)	2010	2015	2020	2025	2030 - opt		
Demand	26,039	26,838	27,317	27,537	27,680		
% of year 2005	106%	109%	111%	112%	112%		

Table 42 Projected Supply and Demand Comparison - AF Year							
	2010	2015	2020	2025	2030 - opt		
Supply totals	26,039	26,838	27,317	27,537	27,680		
Demand totals	26,039	26,838	27,317	27,537	27,680		
Difference	0	0	0	0	0		
Difference as % of Supply	0%	0%	0%	0%	0%		
Difference as % of Demand	0%	0%	0%	0%	0%		

Supply and Demand Comparison: Single-dry Year Scenario

(Water Code § 10635 (a))

YES

Compare the projected single-dry year water supply to projected single-dry year water use over the next 20 years, in 5-year increments.

Chapter 5, Pages 5-3, 5-4

Table 43 Projected single dry year Water Supply - AF Year								
	2010	2015	2020	2025	2030 - opt			
Local Supply	14,682	13,239	13,128	13,224	13,604			
Imported Supply	12,807	15,094	15,709	15,847	15,617			
Supply Totals	27,489	28,333	28,838	29,071	29,221			
% of projected normal	105.6%	105.6%	105.6%	105.6%	105.6%			

Table 44							
Projected single dry year Water Demand - AF Year							
	2010 2015 2020 2025 2030 - op						
Demand	27,489	28,333	28,838	29,071	29,221		
% of projected normal	105.6%	105.6%	105.6%	105.6%	105.6%		

Table 45 Projected single dry year Supply and Demand Comparison - AF Year							
	2010	2015	2020	2025	2030 - opt		
Supply totals	27,489	28,333	28,838	29,071	29,221		
Demand totals	27,489	28,333	28,838	29,071	29,221		
Difference	0	0	0	0	0		
Difference as % of Supply	0.0%	0.0%	0.0%	0.0%	0.0%		
Difference as % of Demand	0.0%	0.0%	0.0%	0.0%	0.0%		

Supply and Demand Comparison: Multiple-dry Year Scenario

(Water Code § 10635 (a))

YES

Project a multiple-dry year period (as identified in Table 9) occurring between 2006-2010 and compare projected supply and demand during those years

Chapter 5, Pages 5-5, 5-6

Ducia stad summ	Table 46								
Supply	Projected supply during multiple dry year period ending in 2010 - AF Year Supply 2008 2009 2009								
Normal									
Local Supply			14,721	14,837	14,759				
Imported Supply			10,796	10,976	11,280				
Supply Totals			25,517	25,813	26,039				
Multiple Dry Year									
Local Supply			15,709	15,052	14,682				
Imported Supply			11,520	11,721	12,807				
Supply Totals			27,230	26,773	27,489				
% of projected normal			106.7%	103.7%	105.6%				

Table 47								
Projected demand multiple dry year period ending in 2010 - AFY								
Demand			2008	2009	2010			
Normal			25,517	25,813	26,039			
Multiple Dry Year			27,230	26,773	27,489			
% of projected normal			106.7%	103.7%	105.6%			

Table 48 Projected Supply and Demand Comparison during multiple dry year period ending in 2010- AF Year									
		2008	2009	2010					
Supply totals		27,230	26,773	27,489					
Demand totals		27,230	26,773	27,489					
Difference		0	0	0					
Difference as % of Supply		0.0%	0.0%	0.0%					
Difference as % of Demand		0.0%	0.0%	0.0%					

Project a multiple-dry year period (as identified in Table 9) occurring between 2011-2015 and compare projected supply and demand during those years

Chapter 5, Pages 5-7, 5-8

	Table 49							
Projected supply during multiple dry year period ending in 2015 - AF Year								
Supply			2013	2014	2015			
Normal								
Local Supply			14,281	14,401	14,444			
Imported Supply			12,259	12,305	12,394			
Supply Totals			26,540	26,707	26,838			
Multiple Dry Year								
Local Supply			13,612	13,053	13,239			
Imported Supply			14,709	14,646	15,094			
Supply Totals			28,321	27,699	28,333			
% of projected normal			106.7%	103.7%	105.6%			

Table 50								
Projected demand multiple dry year period ending in 2015 - AFY								
Demand			2013	2014	2015			
Normal			26,540	26,707	26,838			
Multiple Dry Year			28,321	27,699	28,333			
% of projected normal			106.7%	103.7%	105.6%			

Table 51

Projected Supply and Demand Comparison during multiple dry year period ending in 2015- AF Year

	2013	2014	2015
Supply totals	28,321	27,699	28,333
Demand totals	28,321	27,699	28,333
Difference	0	0	0
Difference as % of Supply	0.0%	0.0%	0.0%
Difference as % of Demand	0.0%	0.0%	0.0%

Project a multiple-dry year period (as identified in Table 9) occurring between 2016-2020 and compare projected supply and demand during those years

Chapter 5, Pages 5-9, 5-10

Table 52 Projected supply during multiple dry year period ending in 2020 - AF Year					
Supply			2018	2019	2020
Normal					
Local Supply			14,506	14,558	14,623
Imported Supply			12,638	12,687	12,694
Supply Totals			27,144	27,245	27,317
Multiple Dry Year					
Local Supply			13,381	12,856	13,128
Imported Supply			15,584	15,402	15,709
Supply Totals			28,965	28,258	28,838
% of projected normal			106.7%	103.7%	105.6%

Table 53					
Projected demand multiple dry year period ending in 2020 - AFY					
Demand	2018 2019 2020				
Normal			27,144	27,245	27,317
Multiple Dry Year			28,965	28,258	28,838
% of projected normal			106.7%	103.7%	105.6%

Table 54 Projected Supply and Demand Comparison during multiple dry year period ending in 2020- AF Year					
2018 2019 2020				2020	
Supply totals		28,965	28,258	28,838	
Demand totals		28,965	28,258	28,838	
Difference		0	0	0	

Difference as % of Supply		0.0%	0.0%	0.0%
Difference as % of Demand		0.0%	0.0%	0.0%

Yes

Project a multiple-dry year period (as identified in Table 9) occurring between 2021-2025 and compare projected supply and demand during those years

Chapter 5, Pages 5-11, 5-12

Table 55 Projected supply during multiple dry year period ending in 2025 - AF Year					
Supply			2023	2024	2025
Normal					
Local Supply			14,796	14,861	14,919
Imported Supply			12,658	12,638	12,619
Supply Totals			27,454	27,499	27,537
Multiple Dry Year					
Local Supply			14,047	12,923	13,224
Imported Supply			15,249	15,599	15,847
Supply Totals			29,296	28,521	29,071
% of projected normal			106.7%	103.7%	105.6%

Table 56					
Projected demand multiple dry year period ending in 2025 - AFY					
Demand	2023 2024 2025				
Normal			27,454	27,499	27,537
Multiple Dry Year			29,296	28,521	29,071
% of projected normal			106.7%	103.7%	105.6%

Table 57 Projected Supply and Demand Comparison during multiple dry year period ending in 2025- AF Year						
			2023	2024	2025	
Supply totals			29,296	28,521	29,071	
Demand totals			29,296	28,521	29,071	
Difference			0	0	0	
Difference as % of Supply			0.0%	0.0%	0.0%	
Difference as % of Demand			0.0%	0.0%	0.0%	

compare projected supply and demand during those years

Table 58 Projected supply during multiple dry year period ending in 2030 - AF Year					
Supply			2028	2029	2030
Normal					
Local Supply			15,057	15,102	15,134
Imported Supply			12,577	12,563	12,546
Supply Totals			27,633	27,665	27,680
Multiple Dry Year					
Local Supply			14,708	13,261	13,604
Imported Supply			14,779	15,432	15,617
Supply Totals			29,487	28,694	29,221
% of projected normal			106.7%	103.7%	105.6%

Table 59					
Projected demand multiple dry year period ending in 2030 - AFY					
Demand	2028 229 2030				
Normal			27,633	27,665	27,680
Multiple Dry Year			29,487	28,694	29,221
% of projected normal			106.7%	103.7%	105.6%

Table 60 Projected Supply and Demand Comparison during multiple dry year period ending in 2030- AF Year						
		2028	2029	2030		
Supply totals		29,487	28,694	29,221		
Demand totals		29,487	28,694	29,221		
Difference		0	0	0		
Difference as % of Supply		0.0%	0.0%	0.0%		
Difference as % of Demand		0.0%	0.0%	0.0%		

Provision of Water Service Reliability section to cities/counties within service area

(Water Code § 10635(b))

YES

Provided Water Service Reliability section of UWMP to cities and counties within which it provides water supplies within 60 days of UWMP submission to DWR

Chapter 1, Page 1-5

Does the Plan Include Public Participation and Plan Adoption

(Water Code § 10642)

YES Attach a copy of adoption resolution

Appendix A

YES YES YES	Encourage involvement of social, cultural & economic community groups Plan available for public inspection Provide proof of public hearing Provided meeting notice to local governments	Chapter 1, Pages 1-5 through 1-7 Chapter 1, Pages 1-5 through 1-7 Board of Directors Meeting Minutes Chapter 1, Page 1-6
Review of	implementation of 2000 UWMP	(Water Code § 10643)
YES N/A NO	Reviewed implementation plan and schedule of 2000 UWMP Implemented in accordance with the schedule set forth in plan 2000 UWMP not required	Chapter 1, Page 1-5 No schedule was set forth in the plan Chapter 1, Pages 1-5, 1-8
Provision	of 2005 UWMP to local governments	(Water Code § 10644 (a))
YES	Provide 2005 UWMP to DWR, and cities and counties within 30 days of adoption	Adoption is scheduled for 12/22/2005
Does the p	plan or correspondence accompanying it show where it is available for public review	(Water Code § 10645)
YES	Does UWMP or correspondence accompanying it show where it is available for public review	Chapter 1, Page 1-6